

CLAIMS

1. An electric toothbrush in which brushing is enabled by back-and-forth linear movement of a tufted portion, wherein the product of the distance (mm) of movement of the tufted portion and the frequency (times) of back-and-forth motion per minute is set in the range of 3000-9000.

2. The electric toothbrush according to claim 1, wherein the product of the distance (mm) of movement of the tufted portion and the frequency (times) of back-and-forth motion per minute is set in the range of 4500-7500.

3. An electric toothbrush in which brushing is enabled by back-and-forth linear movement of a tufted portion, wherein the distance, x (mm), of movement of the tufted portion and the frequency, y (times), of back-and-forth motion per minute are set in a range satisfying the following formula.

$$y = ax + b,$$

Where $a = -3000$, $10,000 \leq b \leq 12500$, $x > 0$.

4. The electric toothbrush according to any claim of claims 1 to 3, wherein the distance of movement of the tufted portion is set at 0.3-0.7 mm.

5. The electric toothbrush according to any claim of claims 1 to 4, wherein the frequency of back-and-forth motion of the tufted portion is set at 8000 to 13000 per minute.

6. An electric toothbrush in which brushing is enabled by back-and-forth linear movement of a tufted portion, wherein the distance of movement of the tufted portion is set at 0.3-0.7 mm and the frequency of back-and-forth motion of said tufted portion is set at 8000 to 13000 per minute.

7. The electric toothbrush according to any claim of claims 1 to 6, wherein filaments in which tip portions of at least 30% or more of all tufted filaments are split into a plurality of portions are used.

8. The electric toothbrush according to any claim of claims 1 to 7, wherein a DC electric motor is used as means for moving said tufted portion.